

CITY OF ALGONAC

2003 WATER QUALITY REPORT

Algonac Water Filtration Plant
1530 St. Clair River Drive
Algonac, MI 48001

PWS ID#: MI0000110

Continuing Our Commitment

Once again we proudly present our annual water quality report. This edition covers all testing completed from January through December 2003. We are pleased to tell you that our compliance with all state and federal drinking water laws remains exemplary. As in the past, we are committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

Security of Our System

All of our lives have changed dramatically and our outlook on security has evolved since the tragic events of September 11, 2001. To this end, we want to ensure all of our customers and citizens of Algonac and Clay Township that security of our Water Filtration Plant and our distribution system is of utmost importance in our everyday operation. We have installed security alarms on all of our facilities and are constantly vigilant of our system. We urge all of our citizens to be vigilant also and even overly cautious as to any suspicious occurrences or questionable persons claiming to be Water Department staff. Please, if in question, request identification of any person(s) claiming to be city personnel before allowing entrance to your home or business. If you have any questions or concerns in this matter, please feel free to call Mr. Gary Trese, Superintendent, at (810) 794-3281, or The City Manager, at (810) 794-9361, and voice your concerns or questions. If you should see or witness any suspicious activity, please do not hesitate to call the Algonac Police Department at (810) 794-9772 or the Algonac Water Department at (810) 794-3281.

We want you to rest assured that we are doing everything in our power to provide the highest level of security for our system and your safety.

Working Hard For You

Under the Safe Drinking Water Act (SDWA), the U.S. Environmental Protection Agency (U.S. EPA) is responsible for setting national limits for hundreds of substances in drinking water and also specifies various treatments that water systems must use to remove these substances. Each system continually monitors for these substances and reports to the U.S. EPA if they were detected in the drinking water. The U.S. EPA uses

these data to ensure that consumers are receiving clean water.

This publication conforms to regulations under the SDWA requiring water utilities to provide detailed water quality information to each of their customers annually. We are committed to providing you with this information about your water supply because customers who are well informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

For more information about this report, or for any questions relating to your drinking water, please call Mr. Gary Trese, Superintendent at (810) 794-3281, or Mr. Chris Wilson, City Manager, at (810) 794-9361.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet the 1st and 3rd Tuesday of each month beginning at 7:30 p.m. at City Hall, 805 St. Clair River Drive.

Where Does My Water Come From?

The City of Algonac Water Filtration Plant provides an excellent and abundant water supply to the citizens of Algonac and Clay Township. We are extremely fortunate to have at our disposal a superb water source known as the St. Clair River, which is considered part of the Great Lakes Water Source. This source is one of the most desirable and sought after water sources known in North America today. Our treatment plant processes over 400 million gallons of clean drinking water to our community annually.

Special Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Substances Expected to be in Drinking Water

To ensure that tap water is safe to drink; the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the

water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it can acquire naturally occurring minerals, in some cases, radioactive material; and can pick up substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

- Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;
- Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;
- Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses;
- Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban storm water runoff, and septic systems;
- Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Information on the Internet

The U.S. EPA Office of Water (www.epa.gov/watrhme) and the Centers for Disease Control and Prevention (www.cdc.gov) Web sites provide a substantial amount of information on many issues relating to water resources, water conservation and public health. Also, the Michigan Department of Environmental Quality has a Web site (www.michigan.gov/deq) that provides complete and current information on water issues in our own state.

Naturally Occurring Bacteria

The simple fact is bacteria and other microorganisms inhabit our world. They can be found all around us: in our food; on our skin; in our bodies; and, in the air, soil and water. Some are harmful to us and some are not. Coliform bacteria are common in the environment and are generally not harmful themselves. The presence of this bacterial form in drinking water is a concern because it indicates that the water may be contaminated with other organisms that can cause disease. Throughout the year, we tested

over **600** samples (over 50 samples every month) for coliform bacteria. In that time, none of the samples came back positive for the bacteria. Federal regulations now require that public water testing positive for coliform bacteria must be further analyzed for fecal coliform bacteria. Fecal coliform are present only in human and animal waste. Because these bacteria can cause illness, it is unacceptable for fecal coliform to be present in water at any concentration. Our tests indicate no fecal coliform is present in our water.

Water Conservation Tips

Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water, but can also save you money by reducing your water bill. Here are a few suggestions:

Conservation measures you can use inside your home include:

- Fix leaking faucets, pipes, toilets, etc.
- Replace old fixtures; install water-saving devices in faucets, toilets and appliances.
- Wash only full loads of laundry.
- Do not use the toilet for trash disposal.
- Take shorter showers.
- Do not let the water run while shaving or brushing teeth.
- Soak dishes before washing.
- Run the dishwasher only when full.

You can conserve outdoors as well:

- Water the lawn and garden in the early morning or evening.
- Use mulch around plants and shrubs.
- Repair leaks in faucets and hoses.
- Use water-saving nozzles.
- Use water from a bucket to wash your car, and save the hose for rinsing.

Information on other ways that you can help conserve water can be found at

www.epa.gov/safewater/publicoutreach/index.html.

Contamination from Cross-Connections

Cross-connections that could contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems) or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand) causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed all industrial, commercial, and institutional facilities in the service area to make sure that all potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test each backflow preventer to make sure that it is providing maximum protection.

For more information, visit the Web site of the American Backflow Prevention Association (www.abpa.org) for a discussion on current issues.

What's In My Water?

We are pleased to report that during the past year, the water delivered to your home or business complied with, or did better than, all state and federal drinking water requirements. For your information, we have compiled a list in the table below showing what substances were detected in our drinking water during 2003. Although all of the substances listed below are under the Maximum Contaminant Level (MCL) set by the U.S. EPA, we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

Regulated Substances

| | Year | | | Amount | Range | | |
|-------------------------------------|---------|-----|------|----------|----------|-----------|---|
| Substance (Units) | Sampled | MCL | MCLG | Detected | Low-High | Violation | Typical Source |
| Fluoride (ppm) | 2003 | 4 | 4 | 0.9 | ND-4 | No | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Haloacetic Acids (HAAs) (ppb) | 2003 | 60 | NA | 19.0* | 7-25 | No | By-product of drinking water disinfection |
| TTHMs [Total Trihalomethanes] (ppb) | 2003 | 80 | 0 | 19.7* | 7.9-27.7 | No | By-product of drinking water disinfection |

**Report highest running quarter average from worksheet

Tap water samples were collected for lead and copper analyses from 20 homes throughout the service area

| | Year | Action | | Amount Detected | Homes Above | | |
|-------------------|---------|--------|------|-----------------|--------------|-----------|---------------------------------|
| Substance (Units) | Sampled | Level | MCLG | (90th % tile) | Action Level | Violation | Typical Source |
| Copper (ppb) | 2002 | 1,300 | 0 | 246 | 0 | No | Corrosion of household plumbing |

| | | | | | | | |
|------------|------|----|---|---|---|----|--|
| | | | | | | | systems; Erosion of natural deposits |
| Lead (ppb) | 2002 | 15 | 0 | 2 | 0 | No | Corrosion of household plumbing systems; Erosion of natural deposits |

Unregulated Substances

| | Year | Amount | Range | |
|-------------------|---------|----------|----------|-----------------------------|
| Substance (Units) | Sampled | Detected | Low-High | Typical Source |
| Sodium (ppm) | 2003 | 5 | NA | Erosion of natural deposits |

Table Definitions

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

NA: Not applicable

ND: Not detected

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

